

NOVEMBER/DECEMBER 2025

FSC11/CSC11 — PROGRAMMING IN C

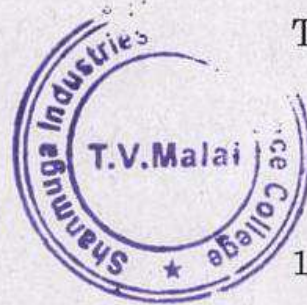
Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Define C tokens with examples.
2. Write any two rules for naming identifiers in C.
3. Differentiate between scanf() and printf().
4. List the differences between while and do-while loop.
5. How is a two-dimensional array initialized?
6. Write the syntax for declaring a string in C.
7. Define recursion.
8. List the advantages of user-defined functions.
9. Differentiate between structure and union.
10. Write the syntax for declaring a pointer.



SECTION B — ($5 \times 5 = 25$ marks)

Answer ALL questions.

11. (a) Write a simple C program to print your name and roll number.

Or

- (b) Compare arithmetic operators and relational operators with suitable examples.

12. (a) Write a program to print the first 10 natural numbers using a for loop.

Or

- (b) Discuss if-else ladder and switch statements with examples.

13. (a) Demonstrate matrix addition using two-dimensional arrays.

Or

- (b) Explain the advantages of multidimensional arrays with examples.

14. (a) Explain the scope, visibility, and lifetime of variables with examples.

Or

- (b) Compare categories of functions with suitable examples.

15. (a) Illustrate structure initialization with an example.

Or

- (b) Write a program to annotate the use of arrays within structures.

SECTION C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Construct and explain the basic structure of a C program with an example.

17. Design a program to check whether a number is prime using decision-making and looping constructs.

18. Write a program to check whether a string is a palindrome.

19. Develop a menu-driven calculator using user-defined functions.

20. Design a program to maintain employee details using arrays of structures.